

## 15 CLISIS ERROR CODES

### 15.1 CLISIS ERROR MANEGEMENT

The **CLISIS** remote tilting table is equipped with self-diagnostic software that continuously monitors the conditions of the electronics circuits. In case a fault condition is detected, a special error message appears on the remote Console display and the circuit that has generated the error is set out of order. The error message appears in the lower row of the display and has the following format:

**System Error : xxxx**

Where **xxxx** represents a unique error identifier.

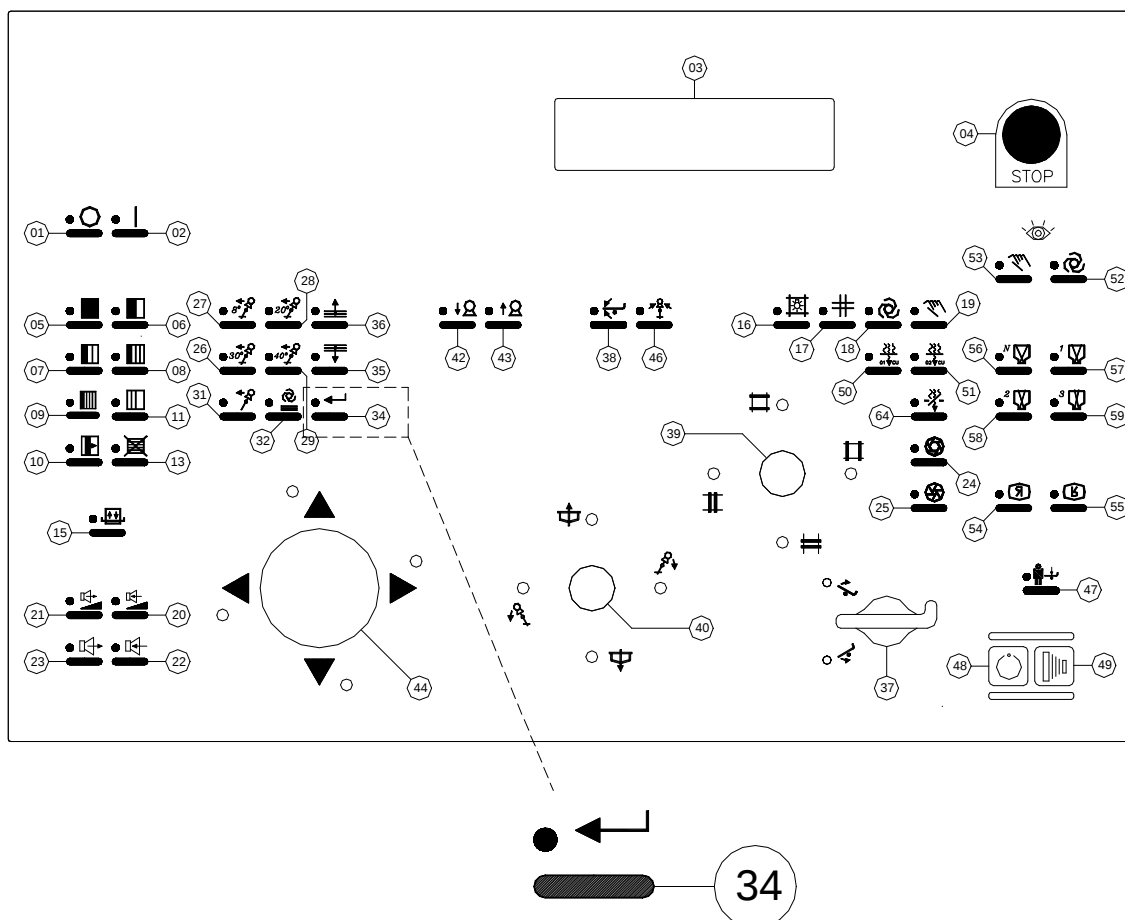
In addition, at unit start up, the control desk CPU executes an initialization of all the slaves CPU of the system. In case a fault condition is detected or the slave does not answer the init message, a specific error message appears on the remote Console display and the slave that has generated the error is set out of order. Thr format of the initialization error is:

**Clisis : Main CPU INIT. error**

**Clisis : SFD CPU INIT. error**

**Clisis : Collimator CPU INIT. error**

The operator, pressing button **34** of the remote Console keyboard, can force the unit to operate with the faulty slave CPU circuits disable. This option must be used only in case of real need and under the responsibility of the operator.



Once the initialization test is passed without error detection, the Console CPU starts checking the congruity of the software version of each single modules. In case this test detects even a single error a specific error message will appear on the LCD display with the following format:

**Clisis : Main CPU software error**  
**Clisis : SFD CPU software error**  
**Clisis : Collimator CPU software error**

In this condition a safe operation of the unit is not possible; the system is set out of service and the user must switch the system OFF and contact the Service team.

Before starting the normal operation, the main CPU starts initializing the longitudinal motor brushless driver. In case an error is detected, the following error message will appear on the LCD display:

**Warning: Longitudinal Driver not initialized**

In this condition a safe operation of the unit is not possible; the system is set out of service and the user can only try to switch the unit OFF, wait for about 20 seconds and switch it ON. In case the error is not cleared he must contact the Service team.

In case, during normal operation, a System error appears on the control desk LCD display, the operator, pressing any button of the remote Console keyboard can force the unit to operate with the faulty circuit or component disabled. The system will try to recover the error condition. In the negative the user must switch the system OFF and contact the Service team.

**IMPORTANT NOTE:**

In case of assistance request is important that the operator minutely describes to the Service team the errors messages displayed and the actual status of the unit. That will allow the service team to reduce at the minimum the Service time.

**WARNING:**

**The unit must not be used in case of fault of the proper circuits or of fault of the system in which it is a part. Identically the unit must not be used in case any alarm device of the whole system is faulty.**

## 15.2 CLISIS ERROR DESCRIPTION

The detailed list of the CLISIS system error with the detailed meaning is the following:

### CONSOLE CPU DETECTED ERRORS:

1000 : Console CPU eeprom error  
1001 : Main CPU Can link error  
1002 : SFD CPU Can link error  
1003 : Collimator CPU Can link error  
1004 : Main CPU reset error  
1005 : SFD CPU reset error  
1006 : Collimator CPU reset error  
1007 : Main CPU WDT error  
1008 : SFD CPU WDT error  
1009 : Collimator CPU WDT error  
1010 : WDT reset problem on console  
1011 : Joystick 1 over voltage  
1012 : Joystick 2 over voltage  
1013 : Joystick 3 over voltage  
1014 : Joystick 4 over voltage  
1015 : Joystick 1 under voltage  
1016 : Joystick 2 under voltage  
1017 : Joystick 3 under voltage  
1018 : Joystick 4 under voltage  
1019 : Keyboard error at power on  
1020 : Joystick 1 fault at startup  
1021 : Joystick 2 fault at startup  
1022 : Joystick 3 fault at startup  
1023 : Joystick 4 fault at startup

### INTERFACE MODULE DETECTED ERRORS:

1024 : Grid not ready  
1025 : Cassette not in the field  
1026 : Generator not in preparation  
1027 : Main CPU not blocked  
1028 : Collimator not in Exposure mode  
1029 : Generator not ready  
1030 : SFD not ready for rx  
1031 : Generator busy  
1032 : Generator error  
1033 : SFD busy  
1034 : SFD error  
1035 : Main CPU busy  
1036 : Main CPU error  
1037 : Generator still in preparation  
1038 : Collimator error  
1039 : Cassette not present  
1040 : SFD still in exposure mode  
1041 : Generator not in exposure mode  
1042 : End of exposure time out error  
1043 : Collimator busy  
1044 : Longitudinal driver communication error

1045 : Motion not allowed  
1046 : Collimator not in Fluoro  
1047 : Tomo not enabled  
1048 : Grid timeout  
1049 : Timeout angle rx on  
1050 : Tomo ready timeout

#### **SFD CPU DETECTED ERRORS:**

2000 : SFD CPU eeprom serial error  
2001 : SFD keyboard error  
2002 : Near film shutter end switch error  
2003 : Near film shutter driver fault  
2004 : Cassette driver fault  
2005 : Cassette brake fault  
2006 : Grid motor fault  
2007 : Grid parking motor fault  
2008 : Grid movement time out error  
2009 : Grid parking timeout error  
2010 : Cassette parking end switch fault  
2011 : Cassette out end switch fault

#### **MAIN CPU DETECTED ERRORS:**

3000 : Main CPU serial eeprom error  
3001 : Tilt motor status #1 error  
3002 : DFF motor status #1 error  
3003 : Tabletop lateral motor status #1 error  
3004 : Compressor motor status #1 error  
3005 : Tilt motor status #2 error  
3006 : DFF motor status #2 error  
3007 : Tabletop lateral motor status #2 error  
3008 : Compressor motor status #2 error  
3009 : Tilt potentiometer feedback error  
3010 : DFF potentiometer feedback error  
3011 : Tube stand potentiometer feedback error  
3012 : SFD potentiometer feedback error  
3013 : Tube incidence potentiometer feedback error  
3014 : Tilt motor timeout error  
3015 : DFF motor timeout error  
3016 : Tabletop lateral motor timeout error  
3017 : Compressor motor timeout error  
3018 : Longitudinal driver timeout error  
3019 : Longitudinal driver: unknown or reserved error  
3020 : Longitudinal driver: peak current  
3021 : Longitudinal driver: disabled by limit switch  
3022 : Longitudinal driver: attempt to access an not configured rpdo  
3023 : Longitudinal driver: position tracking error  
3024 : Longitudinal driver: cannot start for inconsistent database  
3025 : Longitudinal driver: motor stuck  
3026 : Longitudinal driver: cannot start motor  
3027 : Longitudinal driver: feedback lost  
3028 : Longitudinal driver: two digital hall sensor changed at once  
3029 : Longitudinal driver: speed tracking error  
3030 : Longitudinal driver: fatal error : stack overflow  
3031 : Longitudinal driver: user program aborted by error  
3032 : Longitudinal driver: request by user program emit function

3033 : Longitudinal driver: cannot find electrical zero  
3034 : Longitudinal driver: speed limit exceeded  
3035 : Longitudinal driver: cpu exception  
3036 : Longitudinal driver: timing error  
3037 : Longitudinal driver: position limit exceeded  
3038 : Longitudinal driver: can message lost  
3039 : Longitudinal driver: protocol error  
3040 : Longitudinal driver: heartbeat event  
3041 : Longitudinal driver: under voltage  
3042 : Longitudinal driver: over voltage  
3043 : Longitudinal driver: drive overheating  
3044 : Longitudinal driver: short circuit  
3045 : Longitudinal driver: queue is low  
3046 : Longitudinal driver: pointer out of physical range  
3047 : Longitudinal driver: pdo not mapped  
3048 : Longitudinal driver: no more pvt point in table  
3049 : Longitudinal driver: cannot initialize motion  
3050 : Longitudinal driver: mode terminated

4000 : Collimator X-axis optical switch fault  
4001 : Collimator Y-axis optical switch fault  
4002 : Collimator iris optical switch fault  
4003 : Collimator CPU serial eeprom serial error